

Name _____ Period _____

Geometry Unit 12 Worksheet #2 – Central Angles and Arcs

For #1 - 8 , find the measure of the following arcs using the circle at the right.

1. $m\widehat{PQ} =$ _____

2. $m\widehat{PQR} =$ _____

3. $m\widehat{TU} =$ _____

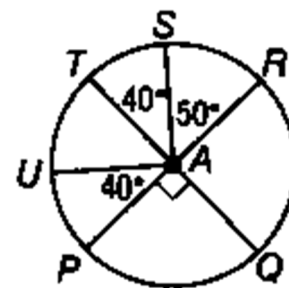
4. $m\widehat{PS} =$ _____

5. $m\widehat{US} =$ _____

6. $m\widehat{PRQ} =$ _____

7. $m\widehat{UTQ} =$ _____

8. $m\widehat{UPS} =$ _____



For #9-16, find the measure of the arcs using the picture at the right.

9. $m\widehat{EA} =$ _____

10. $m\widehat{AB} =$ _____

11. $m\widehat{EAB} =$ _____

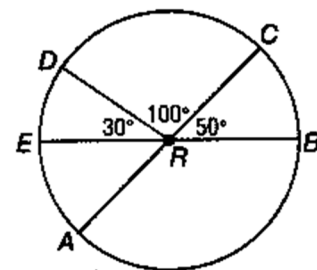
12. $m\widehat{EAC} =$ _____

13. $m\widehat{DEB} =$ _____

14. $m\widehat{CDA} =$ _____

15. $m\widehat{CDB} =$ _____

16. $m\widehat{BCA} =$ _____



For #17 - 24 , PR and QS are diameters. Find the measures of the arcs.

17. $m\widehat{PQ} =$ _____

18. $m\widehat{ST} =$ _____

19. $m\widehat{TPS} =$ _____

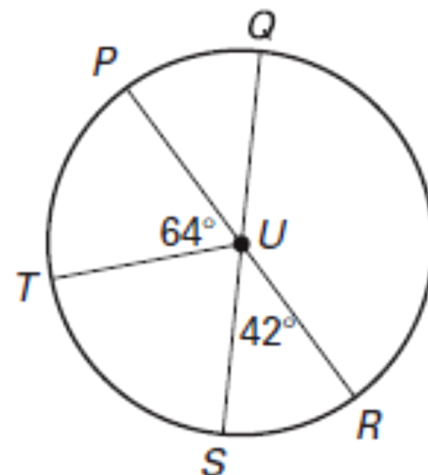
20. $m\widehat{RT} =$ _____

21. $m\widehat{RQS} =$ _____

22. $m\widehat{TQR} =$ _____

23. $m\widehat{PS} =$ _____

24. $m\widehat{PTR} =$ _____



Identifying Arcs

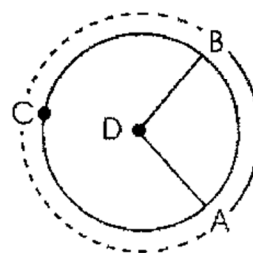
Arc—a continuous portion of a circle's circumference; minor arcs are named with the two points that make the arc; major arcs are named with the three points that make the arc.

Central Angle—an angle with a vertex in the center of a circle; $\angle BDA$ is a central angle.

Minor Arc—an arc created by a central angle with a measure less than or equal to 180° ; \widehat{BA} is a minor arc.

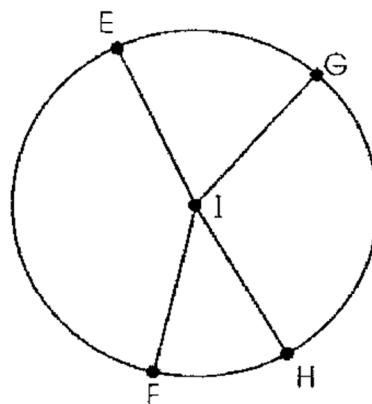
Major Arc—an arc created by a central angle with a measure greater than 180° ; \widehat{BCA} is a major arc.

Geometric Figures



Use the figure to the right to identify each angle or arc by writing *central angle*, *minor arc*, or *major arc*.

1. $\angle GIH$ _____
2. \widehat{EFG} _____
3. \widehat{EG} _____
4. \widehat{GH} _____
5. \widehat{FGE} _____
6. \widehat{HF} _____
7. $\angle HIF$ _____
8. $\angle EIG$ _____



Use the figure to the right to identify each angle or arc by writing *central angle*, *minor arc*, or *major arc*.

9. $\angle XZQ$ _____
10. \widehat{XR} _____
11. \widehat{XPY} _____
12. \widehat{QR} _____
13. \widehat{RPQ} _____
14. \widehat{RP} _____
15. \widehat{RYQ} _____

